Four Types of Best Practices

There is often confusion when design and development teams begin addressing the topic of best practices for a technical tool. Not only do there seem to be a variety of best practices to select from, but there are also best practices that address difference aspects of technology-based tools. Best practices fall into four primary groups:

- 1. Process
- 2. Platform
- 3. Interaction Patterns
- 4. User Interface Design

Key to best practices is understanding the issues each type of practice is trying to address, coming to agreement on the set of practices a team or organization should follow and understanding when it is appropriate to "break the rules."

Below are descriptions of each type of best practices, with some brief explanations of issues that have arisen within eWiSACWIS when reviewing the tool through the "lens" of best practices.

Process Best Practices - Process best practices address the issue of integrating user needs into the design and development effort. Incorporating user needs and requirements into the process is the best way to develop usable products both in the short term and the long term. Some time ago, User Interface Engineering (UIE) studied the effectiveness of usability activities within organizations and found that organizations that were most successful in creating usable products are those that integrate user centered design activities throughout the design development and support effort. Everyone is focused on and responsible for, the user versus having a small group of people responsible for "that usability stuff." (http://www.uie.com/articles/how_companies_think/)

Platform User Interface Design Best Practices – Different platforms (client-server, Web) have different user interface design practices. From reading the eWiSACWIS Style Guide is appears that in the spirit of porting the client-server app to the web platform, they retained the client-server interface design. There are problems that arise when there is a mismatch between the platform and the user interface. For instance, in a Web application, it is very helpful to have visited links (those that a user has clicked on) change color. This is one of the major visual cues that users have to understand where they have been. Visited links do not currently change color in eWiSACWIS.

Another example of this platform/user interface mismatch is that in Web applications controls (typically action buttons) are most often either along the top of the primary content areas or close to the object on which the action is taken. In a client server application, action buttons are in the lower right corner. The challenge with having buttons in the lower right corner in Web apps is that they often fall "below the fold" so they can easily be missed. In a Web application, links typically take a user some place (they're a navigational device) and action buttons perform/transform an action.

Interaction Design Patterns/Behaviors – Interaction design patterns address how something works. An example of this in the architectural world is that of a door. We can all identify a door when we see it. It might be on a car or a building. It might be a different size or shape. But we all know how it works. We don't have to think about it. That is, unless the door does not comply with the interaction pattern - like when a door knob turns opposite of what is expected. This makes the user have to take notice and think about the operation of something that s/he just shouldn't have to.

There are interaction patterns in user interfaces too. If an application complies with these patterns, it helps the user focus on getting their work done (reduces "cognitive load") rather than on how "the door works." The benefit of patterns compliance is that it addresses the issue faced by design and development teams of large, complex web applications: lots of cooks in the kitchen. Interaction patterns allow for some level of variation as long as the underlying interaction pattern is constant (the door opens the same way, the same thing happens each time a user clicks on a link or an action button, etc.). (For additional information see: http://www.uie.com/articles/design_patterns/)

User Interface Design Best Practices – User interface design best practices are what most people think of when they think of best practices and what is primarily included in the eWiSACWIS Style Guide. It is common for people to refer to someone who enforces these at this level the "GUI Cops." While important, you can have an application or a site which is completely compliant with user interface design best practices and have a totally unusable tool. It is easy to get caught up in debating these and lose sight of developing usable tools. It can also be argued that there are good reasons for going against a certain recommendation in certain situations. The important thing is to break the rules with a solid understanding of the best practice and for good reason(s) appropriate for the tool being developed.

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